

61
160. (New) The kit of claim 153 wherein said bispecific antibody binds a cell surface marker.

161. (New) The kit of claim 153 wherein said cell surface marker is CD45.--

REMARKS

In the present application, claims 71-113 were added by the amendment mailed August 21, 2000. By virtue of this response, claims 114-161 are added. Thus, claims 71-161 are currently under examination. Amendment and cancellation of certain claims is not to be construed as a dedication to the public of any subject matter of the claims as previously presented. Applicants reserve the right to prosecute the subject matter of any cancelled claims in related applications.

For the Examiner's convenience, an attachment listing the claims presently under examination, incorporating the current amendments, is attached to this response.

Concerning the new claims

Support for claims 114-115 which recite methods for separating cells can be found at least at page 4, lines 15-17; page 4, lines 27-29; the paragraph bridging pages 4-5; page 6, lines 1-7 and page 9, lines 28-34. Support for claims 116-117 which recite that the capture moiety is coupled to cells through an anchoring moiety can be found at least at page 10, lines 12-19. Support for claim 118 which recites that the cells remain viable during said method can be found at least at page 5, lines 8-10 and page 23, lines 27-32. Support for claims 119-121 that recite a label moiety can be found at page 4, lines 21-26 and page 27, lines 3-9

Support for claim 122 that recites a diameter of magnetic particles can be found at least at page 20, lines 25-27. Support for claim 123 that recites that the capture moiety is an antibody or antigen-binding fragment can be found at page 15, lines 11-14. Support for claim 124, 128 and 152 that recite a bispecific antibody can be found at least at page 6, lines 33-35; page 11, line 26 and lines 29-35. Support for claims 125-126 that recite an anchoring moiety can be found at least at page 10; lines 12-13; lines 20-23; and lines 30-33. Support for claim 127 that recites that the capture moiety is coupled to said cells through direct chemical coupling is found at least at

page 12, lines 10-20 and lines 28-35. Support for claims 129-138 and 153-159 that recite specific products can be found at least at page 10, lines 6-11. Support for claims 139-140 that recite branched polymers can be found at page 10, lines 12-19. Support for claims 141-144 and claims 160-161 that recite cell surface markers can be found at page 10, lines 20-29. Support for claims 145-146 that recite that the cell has been genetically modified can be found at page 24, lines 27-32. Support for claims 147-149 that recite cell compositions can be found at least at page 5, lines 15-17. Support for claim 150 that recites a kit can be found at least at page 6, lines 20-35. Support for claim 151 that recites medium for cell incubation can be found at page 18, lines 9-33.

Section 112, first paragraph rejection of claims 1-6; 17-18; 20-22

In the Advisory Action mailed April 12, 2000, the rejection of claims 1-6; 17-18; and 20-22 under Section 112, first paragraph, was maintained.

Applicants respectfully traverse this rejection as it applies to new claims and submit that the presently claimed invention is enabled across its full scope. Sufficient teachings have been provided in the application to allow one of ordinary skill in the art to practice the invention as claimed with the exercise of routine experimentation. The Advisory Action alleges that the specification does not provide reasonable enablement for methods or kits which do not recite a high viscosity or gel forming medium. Applicants strongly disagree. Applicants submit that the specification teaches methods that distinguish non-producing cells from product producing cells and provides several illustrative examples of such methods. For example, the specification describes various conditions that are taken into consideration in performing the methods, such as, incubation time, cell concentration and incubation medium. See the specification at page 17, lines 6-29. The specification at page 35, lines 27-35, describes methods of separating cells labeled with a product secreted by said cells wherein said methods are performed in the absence of high viscosity or gel forming medium. The specification at page 35, lines 27-35 describes the results of the capture of secreted IgM (see the specification, page 35, line 21) as illustrated by Figures 6a-6d. Figure 6b illustrates that at 30 minutes, two populations of cells can be distinguished. Thus, cells labeled with IgM can be distinguished from non-product labeled cells at the 30 minute time point in the absence of a high viscosity or gel forming medium.

The Advisory Action alleges that Manz et al., establish the need for high viscosity media to practice the instant invention. This clearly has not been demonstrated. The fact that a potentially better separation method might have been discovered after the filing of the application does not defeat the sufficiency of an enabling disclosure at the time of filing. The U.S. Court of Customs and Patent Appeals has rejected the use of a later state of the art as embodied in a publication as a basis for rejection under 35 U.S.C. § 112, first paragraph. See In re Hogan, 559 F.2d 595, 605-606 (CCPA 1977).

In summary, Applicants submit that sufficient teaching has been provided in the application to allow one of ordinary skill in the art to practice all of the inventions claimed in the application as filed. Therefore, Applicants submit that the application is in full compliance with Section 112, first paragraph.

Section 103 rejection of claim 20

In the Advisory Action mailed April 12, 2000, the rejection of claim 20, under Section 103 was maintained as allegedly unpatentable over Kohler et al., in view of Hunt, Segal and art disclosed in the specification.

It is submitted that a proper *prima facie* case has not been established.

In order to establish a *prima facie* case of obviousness, there has to be some motivation or suggestion provided by the references, or in combination with the knowledge available to the skilled artisan, to modify the art cited or to combine reference teachings. The cited references must also provide a reasonable expectation of success. Applicants submit that the combination of references cited does not provide motivation for or a reasonable expectation of successfully arriving at the claimed invention.

New claims 150-161 recite kits comprising at least one of an anchoring moiety and a capture moiety, and a label for detecting the capture moiety. Kohler does not suggest methods or kits for separating product producing cells from non-product producing cells because in Kohler, all cells capture a secreted product, that is, IgM. Kohler does not suggest viable cells labeled with a product wherein the product is labeled with a label moiety for selection. In Kohler, the cells producing product, IgM, are lysed upon binding with complement. Furthermore, there is no suggestion in any of the cited references to combine Kohler with Hunt and Segal and if combined, one of skill in the art would not arrive at the present invention.

Applicants submit that the present invention is non-obvious in view of the cited references and respectfully request a withdrawal of the Section 103 rejection as it applies to new claims.

CONCLUSION

Applicants have, by way of the amendments and remarks presented herein, made a sincere effort to overcome the rejections and address all issues that were raised in the outstanding Office Action. Accordingly, reconsideration and allowance of the pending claims are respectfully requested. If it is determined that a telephone conversation would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 212302000320. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

Dated: October 30, 2000

By: Debra J. Glaister
Debra J. Glaister
Registration No. 33,888

Morrison & Foerster LLP
755 Page Mill Road
Palo Alto, California 94304-1018
Telephone: (650) 813-5725
Facsimile: (650) 494-0792